

WASTEWATER MANAGEMENT PERMIT

This permit is issued under the provisions of Chapter 342D, Hawaii Revised Statutes, and Chapter 11-62, Hawaii Administrative Rules, Department of Health, State of Hawaii.

City and County of Honolulu
Department of Environmental Services
(Sand Island Wastewater Treatment Plant)

and

Synagro – WWT, Inc
In-Vessel Bioconversion Facility
(Sand Island Wastewater Treatment Plant)

(herein "Permittee")

is hereby authorized to operate the wastewater treatment works located at 1350 Sand Island Parkway, Honolulu, Hawaii, Tax Map Key (1) 1-5-041: 005

in accordance with the sludge limitations, monitoring requirements, and other conditions set forth herein, and in the attached Department of Health "Individual and General Permit Standard Conditions", dated April 15, 1997.

Acceptance of this permit constitutes an acknowledgment and agreement that the holder will comply with all rules, regulations, orders of the Department, and the conditions precedent to the granting of this permit.

This permit shall become effective _____.

This permit shall expire at midnight, _____.

Chiyome Leinaala Fukino, M.D.
Director of Health
State of Hawaii

Part A. General Conditions

The Permittee shall:

1. Comply with all Federal and State regulations, and any NPDES permits issued to the facility.
2. Ensure all wastewater pumpers and haulers that discharge wastewater and wastewater sludge into the facility shall be registered with the State. Copies of the wastewater manifests shall be made available to the Director upon request.
3. Retain a copy of this permit and other related materials at the facility or nearby office.
4. Submit signed copies of all reports required by this permit to the Director at the following address or as otherwise specified:

Director of Health
Wastewater Branch
919 Ala Moana Boulevard, Room 309
Honolulu, Hawaii 96814

5. Include the following certification statement and signature on each submittal in accordance with HAR, Chapter 11-55, Section 11-55-07(b):

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment for knowing violations."

6. Include the Wastewater Management permit number on each submittal. Failure to provide the assigned WWM permit number for this facility on future correspondence or submittals may be a basis for delay of the processing of the document(s).
7. Submit any changes to information on file with the DOH as soon as changes arise.

Part B. Special Conditions for the In-Vessel Bioconversion Facility.

In addition to the conditions, above, the Permittee shall:

1. Shall treat all wastewater sludge to meet the exceptional quality criteria specified in section 11-62-42(a). If the wastewater sludge does not meet this criteria:
 - a. The Permittee must inform the Director immediately that the wastewater sludge does not meet the exceptional quality criteria and must submit in writing why the facility did not meet the criteria and any corrective actions taken.
 - b. The wastewater sludge cannot be land applied and must be disposed of in a municipal solid waste landfill or otherwise disposed as approved by the Director.
2. Shall be reuse or dispose of the wastewater sludge in accordance with the applicable portions of:
 - a. 40 CFR 503 and Chapter 11-62, HAR: For wastewater sludge that is land applied.
 - b. 40 CFR 258 and Chapter 11-58.1, HAR: For all wastewater sludge that is disposed in municipal solid waste landfills;
 - c. 40 CFR 257 and Chapter 11-62, HAR: For all wastewater sludge use and disposal practices not covered in 40 CFR 258 or 503.
3. Assure all wastewater sludge produced at the facility are used or disposed of in accordance with 40 CFR 257, 258, and 503, and Chapters 11-58.1 and 11-62, HAR, whether the Permittee reuses or disposes of the wastewater sludge directly or transfers the wastewater sludge to another entity for further treatment, reuse, or disposal. The Permittee is responsible for informing the subsequent preparers, applicers, users, and disposers of the requirements which these entities must meet under 40 CFR 257, 258, and 503, and Chapters 11-58.1 and 11-62, HAR.
4. Not allow any wastewater sludge to enter wetlands or other waters of the United States.
5. Not allow the treatment, storage, reuse, or disposal of wastewater sludge to contaminate groundwater.
6. Minimize the nuisances such as objectionable odors or flies when treating, storing, reusing, or disposing of wastewater sludge.
7. Use only haulers registered in the State, to transport for off-site treatment, reuse, or disposal of wastewater sludge that does not meet the exceptional quality

sludge criteria. In addition, the Permittee shall assure that haulers take all necessary measures to keep the wastewater sludge contained.

8. Comply with all federal and state requirements for surface disposal in 40 CFR 503 Subpart C and section 11-62-45, HAR, if the wastewater sludge is stored for over two years from the time it was generated.
9. Dispose of wastewater sludge containing PCBs equal to or greater than 50 mg/kg of total solids (100% dry weight basis) in accordance with 40 CFR 761. Testing for PCBs shall be at a minimum of once every five years.
10. Provide adequate facilities which divert surface runoff from adjacent areas, protect site boundaries from erosion, and prevent any conditions that would cause drainage to escape from the site. Adequate protection is defined as protection from at least a 100-year storm and from the highest tidal stage that may occur.
11. Monitor the wastewater sludge as follows:
 - a. Wastewater sludge that is land applied shall be tested for the following pollutants using Test Methods for Evaluating Solid Waste Physical/Chemical Methods”, EPA Publication SW-846.
 - i. The frequency of testing shall be done on a monthly basis.
 - ii. Sampling procedures shall follow the protocol submitted to the Director dated October 20, 2005.
 - iii. Pollutant concentration shall not exceed the ceiling limits specified in Chapter 11-62, Table IV, HAR.
 - b. Wastewater sludge that is land applied shall be tested monthly for organic-N, ammonium-N, and nitrate. The frequency of testing shall be done on a monthly basis.
 - c. Wastewater sludge that is land applied shall demonstrate that the wastewater sludge meets Class A pathogen requirements of sections 11-62-43(a)(6) and 11-62-46(d)(2), HAR, and 40 CFR 503 appendix B, section B.2.
 - i. At start up, the wastewater sludge shall be tested for pathogens on a daily basis. At least, fifty grab samples shall be taken throughout the day and refrigerated at 4 degrees Celsius. At the end of the day, twenty-five grab samples shall be thoroughly mixed to form a composite samples and the other twenty-five grab samples shall form another composite sample which will be tested for either fecal coliform or Salmonella. For each composite sample, the density of fecal coliform shall be less than 1000 MPN per gram of total solids

(dry weight basis) or the density of Salmonella shall be less than three MPN per four grams of total solids (dry weight basis).

- ii. Upon the directors discretion and based upon the facility's operations and testing results, the frequency of monitoring for pathogens may be reduced to weekly and/or monthly sampling. For weekly sampling, seven composite samples shall be collected throughout the week. For monthly sampling, seven composites shall be collected throughout the month.
 - iii. The wastewater sludge pellet temperature shall be measured once per shift and no less than twice in a 24 hour period from a sampling point on the outlet side of the rotary drum dryer. The pellet temperature shall be measured with either a bulb or infrared thermometer from this location and the value recorded. The temperature of the wastewater sludge pellets shall exceed 80 degrees Celsius.
 - iv. At the time the wastewater pellets are analyzed for pathogen densities, the pellets shall also be analyzed for percent total solids to show compliance with the Class A requirements.
- d. Wastewater sludge that is land applied shall meet the vector attraction reduction requirements of section 11-62-47, HAR. The percent solids of the wastewater sludge shall be equal to or greater than 75 percent based on the moisture content total solids prior to mixing with other materials for wastewater sludge that does not contain unstabilized solids and equal to or greater than 90 percent based on the moisture content total solids prior to mixing with other materials for wastewater sludge that contains unstabilized solids. At the time the wastewater pellets are analyzed for pathogens, the pellets shall also be analyzed for percent total solids to show compliance with the vector attraction reduction requirements.
12. Comply with the following notification requirements:
- a. The Permittee shall notify the applier(s) in writing of the nitrogen, phosphorus, and potassium content of the wastewater sludge, and of all the appliers' requirements in chapter 11-62, HAR, including the application rates in section 11-62-42(e).
 - b. If wastewater sludge is shipped to another State/Tribal Lands, the Permittee must send notice prior to the initial shipment of wastewater sludge to the permitting authorities in the receiving State/Tribal Land.
13. Submit an annual report to the director by February 19 of each year for the period covering the previous calendar year. The report shall include:

- i. A wastewater sludge balance in dry metric tons, including the amount of wastewater sludge received from each source, wastewater sludge pellets generated that year, the amount pellets accumulated from previous years, and the amount of pellets used, disposed or distributed that year, and the amount of pellets still at the facility at the end of the year.
 - ii. Results of all monitoring required by this permit.
 - iii. A completed Certification Form (Chapter 11-62, Form A).
 - iv. Names, mailing addresses, and street addresses of entities who received wastewater sludge for further treatment, storage, disposal in a municipal solid waste landfill, or for other use or disposal methods not covered above, and the volumes in dry metric tons delivered to each.
14. Not initially use or distribute any wastewater sludge without the written approval of the director.
15. Retain records regarding the wastewater sludge processing including end-product transactions including invoices, billings, and/or manifests, for a minimum of five (5) years. Records of all analytical testing data and temperature monitoring data shall also be maintained for a minimum of five (5) years. Copies shall be made available to the Director upon request.
16. Notify the director, in writing, of any operational changes. A revised operations manual reflecting these changes shall be submitted for the Director's review and approval prior to implementation. Depending on the extent of the proposed changes, a modification to this permit may be required.